

Title (en)

RENEWABLE ENERGY TYPE ELECTRIC POWER GENERATION DEVICE

Title (de)

VORRICHTUNG ZUR STROMERZEUGUNG AUS ERNEUERBARER ENERGIE

Title (fr)

DISPOSITIF GÉNÉRATEUR D'ÉNERGIE ÉLECTRIQUE DU TYPE À ÉNERGIE RENOUVELABLE

Publication

**EP 2570660 A4 20130529 (EN)**

Application

**EP 11797294 A 20110810**

Priority

JP 2011068284 W 20110810

Abstract (en)

[origin: US2012124984A1] A power generating apparatus includes a rotating shaft, a hydraulic pump driven by the rotating shaft, a hydraulic motor driven by operating oil supplied from the hydraulic pump; and a generator coupled to the hydraulic motor. The apparatus further includes an oil line connected to the hydraulic pump and the hydraulic motor for circulating the operating oil between the hydraulic pump and the hydraulic motor, an oil cooler connected to the oil line for cooling the operating oil by heat exchange with a cooling medium, a cooling-medium line supplying the cooling medium to the oil cooler; a bypass line diverging from at least one of the oil line and the cooling-medium line and merging into at least one of the oil line and the cooling-medium line to bypass the oil cooler; and a flow regulating valve in at least one of the oil line and the cooling-medium line.

IPC 8 full level

**F03D 9/00** (2006.01); **F03D 1/06** (2006.01); **F03D 9/02** (2006.01)

CPC (source: EP KR US)

**F03D 9/25** (2016.05 - EP US); **F03D 9/28** (2016.05 - EP KR US); **F03D 13/25** (2016.05 - EP US); **F03D 15/20** (2016.05 - EP US);  
**F03D 80/60** (2016.05 - EP KR US); **F03D 80/70** (2016.05 - KR); **F05B 2260/20** (2013.01 - KR); **F05B 2260/406** (2013.01 - EP KR US);  
**Y02E 10/72** (2013.01 - EP KR US); **Y02E 10/727** (2013.01 - EP US); **Y02P 80/10** (2015.11 - EP US)

Citation (search report)

- [A] NL 8101401 A 19821018 - BERG A P INGBUREAU
- [A] US 2011142596 A1 20110616 - NIES JACOB JOHANNES [NL]
- See references of WO 2013021488A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**US 2012124984 A1 20120524; US 8601804 B2 20131210;** AU 2011338137 A1 20130228; CN 102859188 A 20130102;  
EP 2570660 A1 20130320; EP 2570660 A4 20130529; EP 2570660 B1 20140108; JP 4950367 B1 20120613; JP WO2013021488 A1 20150305;  
KR 20130050274 A 20130515; WO 2013021488 A1 20130214

DOCDB simple family (application)

**US 201113294065 A 20111110;** AU 2011338137 A 20110810; CN 201180005702 A 20110810; EP 11797294 A 20110810;  
JP 2011068284 W 20110810; JP 2011553194 A 20110810; KR 20127017060 A 20110810